AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

Amend the following paragraphs:

[0011] -- The operating voltage of the electrical machine frequently includes a common-mode voltage, which is a significant cause of bearing currents. It is thus advantageous to use the common-mode voltage as an input variable for the voltage production device. The bearing voltages are generally dependent on the common-mode voltage only via a motor-specific transformation ~~disk~~ ratio.--.

[0028] -- The reason for the converter-dependent bearing currents is the so-called "common-mode voltage" in the pulse pattern of the voltage intermediate-circuit converter UR, which is illustrated in Figure 1. The common-mode voltage U_o which is applied to the motor DM can be measured directly, for example, between the star point and the motor housing if the motor windings are connected in star. The electronic switching elements SE in the voltage intermediate-circuit converter UR switch the voltage U_d of the intermediate circuit ZK to the motor windings MW using a control method. A distinction is drawn between so-called on-line and off-line control methods. Irrespective of the control method that is used, the basic voltage waveform U_o at the star point SP is as shown in Figure 1. This voltage waveform results from the voltages U_{LL}, which are likewise shown in Figure 1, between the phases.--.

[0036] -- Damaging bearing currents may also be caused by discharge effects. In this case (see Figure 6 and Figure 7), the capacitance of the roller bearing C_b is charged via the capacitive voltage divider comprising C_{wr}, C_{rh} and C_b for as long as the lubricating film can provide isolation for this voltage. On reaching the breakdown voltage, the capacitance C_b is short-circuited within the bearing, and the capacitance C_{rh} is discharged into this short-circuit. As long as the lubricating film provides isolation, the voltage across the bearing is an image of the

common-mode voltage corresponding to the transformation ~~disk~~ ratio BVR (bearing voltage ~~disk~~ ratio), which is predetermined by the motor design.--.

[0037] -- The transformation ~~disk~~ ratio BVR is governed by the ~~disk~~ ratio of the voltage U_{Zb} across the bearing impedance Z_b and the voltage U_{Cwh} across the capacitance C_{wh}. This ~~disk~~ ratio is typically between 0.02 and 0.2. Figure 7 shows the voltage waveform U_{Zb} for a small value of BVR and for a large value of BVR. In this case, the circuit and the motor winding are supplied with half the intermediate-circuit voltage 0.5 U_d via an impedance Z, with this voltage having the same signal waveform as the voltage U_{Zb}. In this case as well, charging of the bearing can be prevented by a suitable opposing voltage U_k.--.